ABSTRACT OF THE DISCLOSURE

An information reproducing apparatus has an equalizing filter which performs partial response equalization of a detection signal detected by a detecting section and which outputs an equalized signal, a variable gain amplifier which corrects the potential of the equalized signal in accordance with a correction amount determined in accordance with a plurality of reference levels that are used for maximum-likelihood decoding and a plurality of peak levels in a histogram of equalized signals corresponding to the plurality of reference levels, and a maximum-likelihood decoder which performs the maximum-likelihood decoding by referencing the reference levels, in accordance with the equalized signal that has been corrected. The apparatus controls the signal amplitude of the equalized signal to an appropriate value, thereby implementing high-reliable decoding processing.